



Overview of NOAA/NWS Collaborative Science, Technology, and Applied Research (CSTAR) Program

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**Sam Contorno,
NWS/Office of Science and Technology
CSTAR Program Manager
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NWS CSTAR Program

Overview



- ✓ Fully competitive, in-house grants program started in 2000.
- ✓ One- to three-year projects--maximum funding level \$125K/yr.
- ✓ Objective: To improve local forecast and warning services by exploiting S&T advances.
- ✓ How: Applied research and education projects involving collaboration between operational forecasters and university scientists.
- ✓ Proposals must address national, regional or NCEP-related science needs/priorities.
- ✓ Program works hand-in-hand with NWS-funded COMET Outreach Program.
- ✓ HMT was unable to establish extramural grant program in 2007.
- ✓ **Concept of leveraging CSTAR RFP for this purpose discussed and approved by NUEC. Two projects supported in 2007; two news projects supported in 2010.**



CSTAR

Current Program



Two CSTAR projects complementary to HMT efforts were provided USWRP funding beginning in 2007.

- *UA-SUNY--Cooperative Research with the NWS on Cool- and Warm-Season Precipitation Forecasting over the Northeastern U.S. (project results presented by Ben Moore)*
- *University of Utah--Improved Monitoring, Analysis, and Prediction of High Impact Weather (John Horel)*

Two new CSTAR projects are being provided USWRP funding and are beginning work effective May 2010.

- *Stony Brook-SUNY--Predictability of High Impact Weather during the Cool Season over the Eastern U.S: From Model Assessment to the Role of the Forecaster (Brian Colle)*
- *NC State--Improving Prediction of Severe Winds, Convection and Heavy Precipitation in the Southeastern United States (Gary Lackmann)*



CSTAR Benefits



- ✓ Operational Forecast and Warning Improvements Demonstrated as Result of Research Collaborations
- ✓ Leveraging Resources
 - Value of engaging world-class researchers, staffs, students at academic institutions far exceeds cost.
 - Excellent student recruiting tool for university recipients.
- ✓ *Human Resources*
 - As of 1/10, 56 CSTAR “alumni” have been subsequently employed by NOAA.
 - 2 former PIs (Steve Koch and Dave Kingsmill).
 - Of the 54 students, 48 are currently full time NOAA employees, 3 are contractors, 2 have left NOAA to return to school for advanced degrees, and 1 is now with NCAR.
 - 5 SOOs.
 - Produced by 24 projects.



CSTAR Award Recipients



Since program inception:

- ✓ 31 awards have been made
- ✓ 18 unique universities
- ✓ 10 current projects



CSTAR

Upcoming Milestones



- ✓ Three projects expire in the Spring 2011 timeframe
- ✓ NWS will issue next RFP as part of NOAA Omnibus announcement on grants.gov portal and *Federal Register* in June/July 2010
 - *Expectation will be to fund 2-3 new projects starting Spring 2011*
 - *Science needs/priorities will be updated*



Questions?



Sam Contorno

samuel.contorno@noaa.gov

301-713-3557x150

<http://www.nws.noaa.gov/ost/cstar.htm>